

AMENDMENTS TO THE CLAIMS

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Previously Presented) A composition comprising an immunostimulatory nucleic acid comprising the nucleotide sequence of SEQ ID NO:1.
2. (Previously Presented) The composition of claim 1, wherein the immunostimulatory nucleic acid consists of the nucleotide sequence of SEQ ID NO:1.
3. (Original) The composition of claim 1, further comprising an antigen.
4. (Original) The composition of claim 3, wherein the antigen is selected from the group consisting of a microbial antigen, a cancer antigen, and an allergen.
5. (Original) The composition of claim 4, wherein the microbial antigen is selected from the group consisting of a bacterial antigen, a viral antigen, a fungal antigen and a parasitic antigen.
- 6-7. (Cancelled)
8. (Original) The composition of claim 3, wherein the antigen is a peptide antigen.
9. (Original) The composition of claim 1, further comprising an adjuvant.
10. (Original) The composition of claim 9, wherein the adjuvant is a mucosal adjuvant.
11. (Original) The composition of claim 1, further comprising a cytokine.

12. (Previously Presented) The composition of claim 1, further comprising a therapeutic agent selected from the group consisting of an anti-microbial agent, an anti-cancer agent, and an allergy/asthma medicament.

13. (Original) The composition of claim 12, wherein the anti-microbial agent is selected from the group consisting of an anti-bacterial agent, an anti-viral agent, an anti-fungal agent, and an anti-parasite agent.

14. (Original) The composition of claim 12, wherein the anti-cancer agent is selected from the group consisting of a chemotherapeutic agent, a cancer vaccine, and an immunotherapeutic agent.

15. (Original) The composition of claim 12, wherein the allergy/asthma medicament is selected from the group consisting of PDE-4 inhibitor, bronchodilator/beta-2 agonist, K⁺ channel opener, VLA-4 antagonist, neurokin antagonist, TXA₂ synthesis inhibitor, xanthanine, arachidonic acid antagonist, 5 lipoxygenase inhibitor, thromboxin A₂ receptor antagonist, thromboxane A₂ antagonist, inhibitor of 5-lipoxygenase activation protein, and protease inhibitor.

16. (Previously Presented) The composition of claim 1, wherein the immunostimulatory nucleic acid has a nucleotide backbone which includes at least one backbone modification.

17. (Previously Presented) The composition of claim 16, wherein the backbone modification is a phosphorothioate modification.

18. (Previously Presented) The composition of claim 16, wherein the nucleotide backbone is chimeric.

19. (Previously Presented) The composition of claim 16, wherein the nucleotide backbone is entirely modified.

20. (Previously Presented) The composition of claim 1, further comprising a pharmaceutically acceptable carrier.

21. (Cancelled)

22. (Previously Presented) The composition of claim 1, wherein the immunostimulatory nucleic acid includes at least four CpG motifs.

23-26. (Cancelled)

27. (Previously Presented) The composition of claim 1, wherein the immunostimulatory nucleic acid is formulated as a nutritional supplement.

28. (Previously Presented) The composition of claim 27, wherein the nutritional supplement is formulated as a capsule, a pill, or a sublingual tablet.

29. (Previously Presented) The composition of claim 1, wherein the immunostimulatory nucleic acid is formulated for local administration.

30. (Previously Presented) The composition of claim 1, wherein the immunostimulatory nucleic acid is formulated for parenteral administration.

31. (Previously Presented) The composition of claim 1, wherein the immunostimulatory nucleic acid is formulated in a sustained release device.

32. (Previously Presented) The composition of claim 1, wherein the immunostimulatory nucleic acid is formulated for delivery to a mucosal surface.

33-42. (Cancelled)

43. (Previously Presented) The composition of claim 31, wherein the sustained release device is a microparticle.

44. (Cancelled)

45. (Currently Amended) A method for stimulating an immune response in a subject in need thereof, the method comprising
administering to the subject a therapeutic agent in an amount effective to stimulate an immune response, wherein the therapeutic agent is the immunostimulatory nucleic acid of claim 1, and wherein the subject has or is at risk of developing a cancer.

46. (Previously Presented) The method of claim 45, wherein the subject has or is at risk of developing an infection.

47-52. (Cancelled)

53. (Previously Presented) The method of claim 45, further comprising administering an antigen to the subject.

54. (Currently Amended) The method of claim ~~52~~ 53, wherein the antigen is selected from the group consisting of a microbial antigen, a cancer antigen, and a self antigen, ~~and an allergen.~~

55-56. (Cancelled)

57. (Previously Presented) The method of claim 45, wherein the immune response is an antigen-specific immune response.

58-62. (Cancelled)

63. (Previously Presented) The method of claim 45, further comprising administering to the subject a second therapeutic agent.

64-69. (Cancelled)

70. (Previously Presented) The method of claim 45, wherein the immunostimulatory nucleic acid has a nucleotide backbone which includes at least one backbone modification.

71. (Previously Presented) The method of claim 70, wherein the backbone modification is a phosphorothioate modification.

72. (Previously Presented) The method of claim 70, wherein the nucleotide backbone is chimeric.

73. (Previously Presented) The method of claim 70, wherein the nucleotide backbone is entirely modified.

74-75. (Cancelled)

76. (Previously Presented) The method of claim 45, wherein the immunostimulatory nucleic acid is administered orally.

77. (Previously Presented) The method of claim 45, wherein the immunostimulatory nucleic acid is administered locally.

78. (Previously Presented) The method of claim 45, wherein the immunostimulatory nucleic acid is administered parenterally.

79. (Previously Presented) The method of claim 45, wherein the immunostimulatory nucleic acid is administered in a sustained release device.

80. (Previously Presented) The method of claim 45, wherein the immunostimulatory nucleic acid is administered to a mucosal surface.

81-82. (Cancelled)

83. (Previously Presented) The method of claim 80, wherein the mucosal surface is selected from the group consisting of an oral, nasal, rectal, vaginal, and ocular surface.

84. (Previously Presented) The method of claim 45, further comprising isolating an immune cell from the subject, contacting the immune cell with an effective amount to activate the immune cell of the immunostimulatory nucleic acid and re-administering the activated immune cell to the subject.

85-87. (Cancelled)

88. (Previously Presented) The method of claim 45, wherein the subject is a human.

89. (Previously Presented) The method of claim 45, wherein the subject is selected from the group consisting of a dog, cat, horse, cow, pig, sheep, goat, chicken, monkey and fish.

90-93. (Cancelled)

94. (Currently Amended) The method of claim ~~52~~ 45, wherein the cancer is selected from the group consisting of biliary tract cancer; bone cancer; brain and CNS cancer; breast cancer; cervical cancer; choriocarcinoma; colon cancer; connective tissue cancer; endometrial cancer; esophageal cancer; eye cancer; gastric cancer; Hodgkin's lymphoma; intraepithelial neoplasms; larynx cancer; lymphomas; liver cancer; lung cancer; ~~small-cell lung cancer; non-small-cell lung cancer~~; melanoma; neuroblastomas; oral cavity cancer; ovarian cancer; pancreas cancer; prostate cancer; rectal cancer; sarcomas; skin cancer; testicular cancer; thyroid cancer; and renal cancer.

95. (Previously Presented) The method of claim 45, further comprising administering an antibody specific for a cell surface antigen, and wherein the immune response results in antigen dependent cellular cytotoxicity (ADCC).

96. (Cancelled)

97. (Previously Presented) A method for inducing an innate immune response, comprising administering to the subject the immunostimulatory nucleic acid of claim 1 in an amount effective for activating an innate immune response.

98. (Cancelled)

99. (Previously Presented) The composition of claim 1, wherein the immunostimulatory nucleic acid molecule is up to 100 nucleotides in length.

100. (New) The method of claim 94, wherein the lung cancer is small cell lung cancer.

101. (New) The method of claim 94, wherein the lung cancer is non-small cell lung cancer.